APPENDIX: CANCER PREVENTION AND SCREENING RECOMMENDATIONS

Female Breast Cancer Screening

1998 Cancer Control Plan Recommendations

- For women without a family history of pre-menopausal breast cancer, CBE should be performed at the periodic health examination after the age of 30.
- Annual CBE and mammography after age 40.
- For women with a first degree relative diagnosed with pre-menopausal breast cancer, annual mammography should commence 5-10 years prior to the age at which the relative was diagnosed.
- Women with BRCA1 and BRCA2 mutations should commence monthly BSE by 20 years of age, and should receive annual or semiannual CBE, and annual mammography, beginning at age 25 to 35 years.

2002 USPSTF Recommendations

- Recommends screening mammography every 1-2 years, with or without clinical breast examination, among women aged 40 and older.
- Recommends women should be informed of potential benefits, limitations, and possible harms of mammography in making decisions about when to begin screening.
- Concludes that there is insufficient evidence to recommend for or against routine clinical breast examination alone to screen for breast cancer.
- Concludes that there is insufficient evidence to recommend for or against teaching or performing routine breast self-examination.

<u>American Cancer Society Recommendations</u>

- Women age 40 and older should have a screening mammogram every year, and should continue to do so for as long as they are in good health.
- Women in their 20s and 30s should have a clinical breast examination (CBE) as part of a periodic (regular) health exam by a health professional preferably every 3 years. After age 40, women should have a breast exam by a health professional every year.
- BSE is an option for women starting in their 20s. Women should be told about the benefits
 and limitations of BSE. Women should report any breast changes to their health professional
 right away.
- Women at increased risk should talk with their doctor about the benefits and limitations of starting mammograms when they are younger, having additional tests, or having more frequent exams. Women should discuss with their doctor what approaches are best for them. Although the evidence currently available does not justify recommending ultrasound or MRI for screening, women at increased risk might benefit from the results.

National Cancer Institute Recommendations (Mammography)

- Women in their 40s should be screened every one to two years with mammography.
- Women aged 50 and older should be screened every one to two years.
- Women who are at higher than average risk of breast cancer should seek expert medical advice about whether they should begin screening before age 40 and the frequency of screening.

Cervical Cancer Screening

1998 Cancer Control Plan Recommendations

- For women in high-risk groups -- women with multiple sex partners, sexually promiscuous partners, early age at first intercourse, and/or a history of a sexually transmitted disease (including human papilloma virus) -- Pap smears should be performed annually.
- For women who are HIV positive, Pap smears should be performed at least annually.
- For asymptomatic women with a cervix and no risk factors, regular Pap smears should be
 performed if a woman is or has been sexually active. There is no upper age limit for the
 performance of regular Pap smears.
- If a history of past and/or present sexual activity cannot be accurately determined and a woman is 18 years of age or over, routine Pap screening should be initiated.
- Women who have had a hysterectomy cannot be presumed to be without cervical tissue and the decision to screen them with Pap smears should be determined on a case-by-case basis.

2003 USPSTF Recommendations

- Strongly recommends screening women for cervical cancer if they are sexually active and have a cervix.
- Recommends against routinely screening women older than age 65 if they have had adequate recent screening with normal Pap smears and are not otherwise at increased risk for cervical cancer.
- Recommends against routine Pap screening for women who have had a total hysterectomy for benign disease.
- Concludes that the evidence is insufficient to recommend for or against new technologies (such as ThinPrep®) in place of conventional Pap tests.
- Concludes that the evidence is insufficient to recommend for or against human papillomavirus (HPV) testing as a primary screening test for cervical cancer.

American Cancer Society Recommendations

- All women should begin cervical cancer screening about 3 years after they begin having vaginal intercourse, but no later than when they are 21 years old. Screening should be done every year with the regular Pap test or every 2 years using the newer liquid-based Pap test.
- Beginning at age 30, women who have had 3 normal Pap test results in a row may get screened every 2 to 3 years with either the conventional (regular) or liquid-based Pap test. Women who have certain risk factors such as diethylstilbestrol (DES) exposure before birth, HIV infection, or a weakened immune system due to organ transplant, chemotherapy, or chronic steroid use should continue to be screened annually.
- Another reasonable option for women over 30 is to get screened every 3 years (but not more frequently) with either the conventional or liquid-based Pap test, plus the HPV DNA test.
- Women 70 years of age or older who have had 3 or more normal Pap tests in a row and no abnormal Pap test results in the last 10 years may choose to stop having cervical cancer screening. Women with a history of cervical cancer, DES exposure before birth, HIV infection or a weakened immune system should continue to have screening as long as they are in good health.
- Women who have had a total hysterectomy (removal of the uterus and cervix) may also choose to stop having cervical cancer screening, unless the surgery was done as a treatment for cervical cancer or precancer. Women who have had a hysterectomy without removal of the cervix should continue to follow the guidelines above.

National Cancer Institute Recommendations

- Cervical cancer screening should begin approximately three years after a woman begins having sexual intercourse, but no later than at 21 years old.
- Experts recommend waiting approximately three years following initiation of sexual activity because transient HPV infections and cervical cell changes that are not significant are common and it takes years for a significant abnormality or cancer to develop. Cervical cancer is extremely rare in women under the age of 25.
- Women should have a Pap test at least once every three years.
- Women 65 to 70 years of age who have had at least three normal Pap tests and no abnormal Pap tests in the last 10 years may decide, upon consultation with their healthcare provider, to stop cervical cancer screening.
- Women who have had a total hysterectomy (removal of the uterus and cervix) do not need to undergo cervical cancer screening, unless the surgery was done as a treatment for cervical precancer or cancer.
- Women should seek expert medical advice about when they should begin screening, how
 often they should be screened, and when they can discontinue cervical screenings,
 especially if they are at higher than average risk of cervical cancer due to factors such as
 HIV infection.

Colorectal Cancer Screening

1998 Cancer Control Plan Recommendations

- All persons should receive an annual digital rectal examination beginning at age 40.
- All persons 50 years of age and over should receive fecal occult blood testing annually and flexible sigmoidoscopy every 5 years. Persons positive by either screening test should be referred for colonoscopy.
- Persons at elevated risk for the development of colorectal cancer should be referred for diagnosis and management if there is:
 - a family history of hereditary syndromes associated with a high incidence of colon cancer (polyposis syndromes),
 - at least one first degree relative with colorectal cancer
 - a personal history of colon adenomas or colon cancer, inflammatory bowel disease involving the colon.

2002 USPSTF Recommendations

The USPSTF strongly recommends that clinicians screen men and women aged 50 and older who are at average risk for colorectal cancer. For those at higher risk, such as those with a first-degree relative diagnosed with colorectal cancer before age 60, it is reasonable to begin screening at a younger age. Screening options for colorectal cancer include home fecal occult blood test (FOBT), flexible sigmoidoscopy, the combination of home FOBT and flexible sigmoidoscopy, colonoscopy, and double-contrast barium enema.

<u>American Cancer Society Recommendations</u>

- Beginning at age 50, both men and women should follow one of the five screening options below:
 - A fecal occult blood test (FOBT)* every year,
 - Flexible sigmoidoscopy every 5 years,
 - A fecal occult blood test every year plus flexible sigmoidoscopy every 5 years,
 - (Of these first 3 options, the combination of FOBT every year and flexible sigmoidoscopy every 5 years is preferable.)
 - Double-contrast barium enema every 5 years, or
 - Colonoscopy every 10 years.

National Cancer Institute Recommendations

None

^{*} For FOBT, the take-home multiple sample method should be used.

Lung Cancer Prevention

1998 Cancer Control Plan Recommendations

- Avoid tobacco use.
- Avoid environmental tobacco smoke.

1996 USPSTF Recommendations

- Tobacco cessation counseling on a regular basis is recommended for all persons who use tobacco products.
- The prescription of nicotine patches or gum is recommended as an adjunct for selected patients.
- In addition:
 - Pregnant women and parents with children living at home should be counseled on the potentially harmful effects of smoking on fetal and child health.
 - Anti-tobacco messages are recommended for inclusion in health promotion counseling of children, adolescents, and young adults.

American Cancer Society Recommendations*

• The best way to prevent lung cancer is to not smoke and to avoid people who do. If you already smoke, you should quit. You should also avoid breathing in other people's smoke.

National Cancer Institute Recommendations

- Quitting smoking is beneficial at all ages, and the earlier in life one quits, the greater the benefits.
- Nicotine dependence exposes smokers in a dose-dependent fashion to carcinogenic and genotoxic elements that cause lung cancer. Overcoming nicotine dependence is often extremely difficult. The Agency for Health Care Policy and Research released in 1996 a set of clinical smoking-cessation guidelines for helping nicotine-dependent patients and healthcare providers. The 6 major elements of these guidelines include:
 - Clinicians must document the tobacco-use status of every patient.
 - Every patient using tobacco should be offered one or more of the effective smoking cessation treatments that are available.
 - Every patient using tobacco should be provided with at least one of the effective brief cessation interventions that are available.
 - In general, more intense interventions are more effective than less intense interventions in producing long-term tobacco abstinence, reflecting the dose-response relationship between the intervention and its outcome.
 - One or more of the 3 treatment elements identified as being particularly effective should be included in smoking-cessation treatment:
 - Nicotine-replacement, e.g., nicotine patches, gum.
 - Social support from clinician in the form of encouragement, assistance.
 - Skills training/problem solving (cessation/abstinence techniques).
 - To be effective, health care systems must make institutional changes resulting in systematic identification of tobacco users and intervention with these patients at every visit.

^{*} Recommendations pulled from text (not explicitly stated in document).

Lung Cancer Screening

1998 Cancer Control Plan Recommendations

None

1996 USPSTF Recommendations

 Routine screening for lung cancer with chest radiography or sputum cytology in asymptomatic persons is not recommended. All patients should be counseled against tobacco use (see Chapter 54).

American Cancer Society Recommendations

None

National Cancer Institute Recommendations

None

Melanoma of Skin Prevention

1998 Cancer Control Plan Recommendations

- Avoid excessive sun exposure.
- Use protective clothing whenever excessive exposure to sunlight is anticipated.
- Children, individuals who cannot avoid excessive sun exposure, and individuals who are at substantially increased risk for skin cancer should use sunscreen (at least SPF 15).
- Do not use artificial tanning devices such as commercial tanning booths and sun lamps used in the home.

1996 USPSTF Recommendations

Counseling patients at increased risk of skin cancer to avoid excess sun exposure is
recommended, based on the proven efficacy of risk reduction, although the effectiveness
of counseling has not been well established. There is insufficient evidence to recommend
for or against sunscreen use for the primary prevention of skin cancer.

<u>American Cancer Society Recommendations</u>

- The most important ways to lower your risk of melanoma are to avoid being outdoors in intense sunlight too long and to practice sun safety when you are outdoors even on cloudy or cool days. You can maintain your level of outdoor physical activity and protect your skin at the same time. Practicing sun safety includes:
 - Seeking shade avoid being outdoors in sunlight too long
 - Protecting your skin with clothing
 - Using sunscreen SPF of 15 or more
 - Wearing sunglasses wrap-around sunglasses with 99% to 100% UV absorption
 - Avoiding other sources of UV light avoid tanning beds and sun lamps
 - Protecting children from the sun
 - Identifying abnormal moles and having them removed
 - Learning more about skin cancer prevention
 - Getting genetic counseling If several members of one side of your family have had melanoma, if you have had multiple melanomas, or if you have had melanoma at young age or have dysplastic nevi, you may have a gene mutation causing melanoma and should talk to your doctor about genetic counseling.

National Cancer Institute Recommendations

None

Melanoma of Skin Screening

1998 Cancer Control Plan Recommendations

- Do not recommend for or against routine screening for skin cancer by primary care providers.
- Clinicians should remain alert for skin lesions with malignant features (i.e., asymmetry, border irregularity, color variability, diameter > 6mm, or rapidly changing lesions) when examining patients for other reasons, particularly patients with established risk factors, including clinical evidence of melanocytic precursor or marker lesions, large numbers of common moles, immunosuppression, a family or personal history of skin cancer, substantial cumulative lifetime sun exposure, intermittent intense sun exposure or severe sunburns in childhood, freckles, poor tanning ability, light skin, hair, and eye color.
- Recommend to consider referring patients at substantially increased risk of malignant melanoma to dermatologists specializing in skin cancer for evaluation and surveillance.
 Persons at substantially increased risk for malignant melanoma include those with melanocytic precursor or marker lesions, e.g., atypical moles [also called dysplastic nevi], certain congenital nevi, familial atypical mole, and melanoma syndrome.

2001 USPSTF Recommendations

• The U.S. Preventive Services Task Force (USPSTF) concludes that the evidence is insufficient to recommend for or against routine screening for skin cancer using a total-body skin examination for the early detection of cutaneous melanoma, basal cell cancer, or squamous cell skin cancer.

American Cancer Society Recommendations

- A monthly skin self-exam
- That your routine health exam include a skin examination for cancer

National Cancer Institute Recommendations

None

Oral Cavity Cancer Screening

1998 Cancer Control Plan Recommendations

 Primary care providers should remain alert to the signs of early oral cancer, particularly leukoplakia and erythroplakia, and should refer patients with these lesions to a surgical specialist for further evaluation and treatment.

1996 USPSTF Recommendations

There is insufficient evidence to recommend for or against routine screening of
asymptomatic persons for oral cancer by primary care clinicians. All patients should be
counseled to discontinue the use of all forms of tobacco (see Chapter 54) and to limit
consumption of alcohol (see Chapter 52). Clinicians should remain alert to signs and
symptoms of oral cancer and premalignancy in persons who use tobacco or regularly use
alcohol.

American Cancer Society Recommendations

None

National Cancer Institute Recommendations

None

Ovarian Cancer Screening

1998 Cancer Control Plan Recommendations

None

1996 USPSTF Recommendations

Routine screening for ovarian cancer by ultrasound, the measurement of serum tumor
markers, or pelvic examination is not recommended. There is insufficient evidence to
recommend for or against the screening of asymptomatic women at increased risk of
developing ovarian cancer.

<u>American Cancer Society Recommendations</u>

None

National Cancer Institute Recommendations

None

Prostate Cancer Screening

1998 Cancer Control Plan Recommendations

• Primary care providers should inform men ages 45 and over about the known risks and potential benefits of prostate cancer screening with the PSA and DRE, and make available annual screening with PSA and DRE to men ages 50 and over with at least a 10-year life expectancy and to men ages 45 and over with a high risk of developing prostate cancer (i.e., men with a family history of prostate cancer and African-American men) who, after considering information about the known risks and potential benefits of prostate cancer screening, request to be screened.

2002 USPSTF Recommendations

 The USPSTF concludes that the evidence is insufficient to recommend for or against routine screening for prostate cancer using prostate specific antigen (PSA) testing or digital rectal examination (DRE). Although the Task Force found evidence that screening can find prostate cancer early and that some cancers benefit from treatment, the Task Force is uncertain whether the potential benefits of prostate cancer screening justify the potential harms.

American Cancer Society Recommendations

None

National Cancer Institute Recommendations

None

Sources for Cancer Prevention and Screening Recommendations

1998 Cancer Control Plan Recommendations: Rhode Island Department of Health. Cancer Control Rhode Island – Strategic Plan for 1998-2005. Providence, RI: Rhode Island Department of Health, September, 1998.

<u>USPSTF Recommendations</u>: varies by year

2000 - 2003: US Preventive Services Task Force. Guide to clinical preventive services, 3rd ed., Periodic Updates. Agency for Healthcare Research and Quality, Rockville, MD. http://www.ahrq.gov

1996: US Preventive Services Task Force. Guide to clinical preventive services, 2nd ed.

Agency for Healthcare Research and Quality. Baltimore: Williams and Wilkins, 1996.

<u>American Cancer Society Recommendations</u>: American Cancer Society. Copyright 2003. <u>www.cancer.org</u>

National Cancer Institute Recommendations: varies by cancer site

Breast cancer: National Cancer Institute. *NCI Statement on Mammography Screening*. www.cancer.gov Posted date: January 31, 2002

Cervical cancer: National Cancer Institute. *Task Force Announces New Cervical Cancer Screening Guidelines*. <u>www.cancer.gov</u> Posted date: January 22, 2003

Lung cancer: National Cancer Institute. *Prevention and Cessation of Cigarette Smoking: Control of Tobacco Use.* PDQ cancer information summaries. www.nci.nih.gov
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